

Claims

1. A method of operating a forward error correction decoder, the method comprising:
5 determining which data elements in a code word including parity data elements are error-free;
marking elements in an erasure information word which correspond to error-free data elements as correct;
maintaining a count of elements marked as correctable in the erasure
10 information word; and
whilst the count of elements marked as correctable has not exceeded a threshold and whilst elements not marked as correct or correctable remain in the erasure information word, marking non-marked elements of the erasure information word as correctable beginning with elements corresponding to parity data elements
15 and then continuing for the other elements in the erasure information word.
2. A method as claimed in claim 1, further comprising indicating the presence of uncorrected data at an output.
- 20 3. A method as claimed in either preceding claim, in which the code word is a row of a coding table.
4. A method as claimed in any preceding claim, in which the decoder is a Reed Solomon decoder.
- 25 5. A forward error correction decoder, comprising one or more processors arranged to:
determine which data elements in a code word including parity data elements are error-free;
30 mark elements in an erasure information word which correspond to error-free data elements as correct;
maintain a count of elements marked as correctable in the erasure information word; and

mark, whilst the count of elements marked as correctable has not exceeded a threshold and whilst elements not marked as correct or correctable remain in the erasure information word, non-marked elements of the erasure information word as correctable beginning with elements corresponding to parity data elements and then
5 continuing for the other elements in the erasure information.

6. A decoder as claimed in claim 5, in which the one or processors is further arranged to indicate the presence of uncorrected data at a decoder output.

10 7. A decoder as claimed in claim 5 or claim 6, in which the code word is a row of a coding table.

8. A decoder as claimed in any of claims 5 to 7, implemented as a Reed Solomon decoder.

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9. A decoder as claimed in any of claims 5 to 8, in which the decoder has 255 element columns, 191 of which are non-parity data element columns.

10. A receiver including a forward error correction decoder as claimed in any of
20 claims 5 to 9.

11. A receiver as claimed in claim 10, implemented as a digital video broadcasting receiver.

25 12. A mobile terminal including a receiver as claimed in claim 10 or claim 11.